Master’s Thesis of SNU GSIS

How South Korea’s Media Industry is Impacted Through Digital Trade

- Rise of Netflix -

디지털 통상이 한국 미디어 산업에 미치는 영향:
넷플릭스

August 2022

Graduate School of International Studies
Seoul National University
International Commerce Major
Sunho Chung

How South Korea's Media Industry is Impacted Through Digital Trade
- Rise of Netflix -

Ahn, Dukgeun

Submitting a master's thesis of
International Studies

August 2022

Graduate School of International Studies
Seoul National University
International Commerce Major

Sunho Chung

Confirming the master's thesis written by
Sunho Chung
August 2022

Chair	**Jeong, Hyeok**	**(Seal)**
Vice Chair	**Ahn, Jaebin**	**(Seal)**
Examiner	**Ahn, Dukgeun**	**(Seal)**

Abstract

Digital Trade has shifted the method of consuming goods and services from offline to online, increasing borderless trade through electronic means. As trade regulations are still very limited to physical goods, digitally traded services do not have to abide by the existing regulations. Given the broad scope of digital trade, this thesis will mainly focus on the streaming service, Netflix, (digitally traded content) that is highly interconnected with audiovisual content, telecommunications, and the government. Traditionally, South Korea’s media industry is very well protected through governmental regulations: KORUS FTA and Broadcasting Act, but online streaming services are not subject to the existing legacy limits. This led to domestic produced media content not having to abide by the domestic regulations when partnered up with global streaming services. And with Covid 19 pandemic, the Korean film market was substantially harmed as moviegoers and average films per capita dropped significantly due to social distancing and lockdowns. These reasons led the streaming giant, Netflix, to lure domestic producers to collaborate with them to produce original content for global audiences. Netflix decreases the relevance of distance geographically, linguistically, culturally, and most importantly in a regulatorily. This thesis will address two impacts that digital trade brought to the media industry directly and indirectly, respectively. 1) The lack of regulations has led Netflix to enter the domestic market through the back door entrance and disrupted the ecosystem of the domestic audiovisual market. 2) The collateral damage of the unexpected entrance of Netflix is the rising issue of net neutrality, a principle that internet providers should treat all data equally without discrimination. An analysis of the trifold relationship between telecommunications, government, and streaming services will be given.

Keywords: Digital Trade, Media Industry, Netflix, Net Neutrality, Streaming Services, KORUS FTA, Broadcasting Act
Student Number: 2020-23706

I. Introduction

1.1 Research Background

International trade's spectrum has widened with the continual development of technology and increasing globalization, especially with the Covid 19 pandemic due to lockdowns and social distancing. Digital trade has expanded the scope of consumerism from traditional manufacturing goods to digital services, as 63% of the global population are online users as of April 2022[1]. Digital trade has shifted the paradigm of consuming goods and services from offline to online and has impacted several industries directly and indirectly, such as brick-and-mortar stores to online shopping. Digital trade, also called 'electronic commerce' by WTO, is defined as the production to delivery of goods and services through electronic means[2] and is also defined as the 'US and international trade where the internet plays a significant role in delivering goods and services' by the U.S. International Trade Commission[3]. In this thesis, the scope of digital trade will be specified within the media industry: content and audiovisual, a digitally intensive industry[4].

South Korea's media industry is rich, competitive, and protected, and is considered one of the major industries for the future national economy, even more than ever with the current rise of 한류 (Hallyu). With abundant ICT infrastructures and popular content, the Korean film industry has grown into a globally active market through multiplexes development and popular movie-going culture[5]. Over the past decade, South Korea has become the content powerhouse with popular Hallyu wave dramas, films, and music. According to the Korea Film Council, the Korean film market is estimated at around $ 5 billion with over 226 million moviegoers in 2019, which is equivalent to 4.37

---

[1] Datareportal, Digital Around the World. There are 5 billion internet users – 63% of the world's population. The latest data indicates a growth of 200 million users in the 12 months to April 2022 and the current trend suggests that two-thirds of the world's population should be online by the middle of 2023. https://datareportal.com/global-digital-overview

[2] WTO, WTO E-Commerce Work Program: "Digital trade includes the use of the internet to search, purchase, sell and deliver a good or service across borders and includes how internet access and cross-border data flows enable digital trade".

[3] *Ibid.,* U.S. International Trade Commission defines digital economy as "U.S. domestic commerce and international trade in which the internet and internet-based technologies play a particularly significant role in ordering, producing, or delivering products and services".

[4] WTO, according to ITC report

[5] International Trade Administration: South Korea – Country Commercial Guide.

films per capita, one of the highest in the world[6]. To enter the Korean film market, foreign companies are obligated to follow a few key measures of governmental regulations: KORUS FTA and Broadcasting Act. The screen quota was first established in 1960 to protect the domestic film industry and is still in effect today to show at least 73[7] days of domestic films annually, also listed in the KORUS FTA. All films, videos, and other audiovisual content are obliged to receive a rating from the Korean Media Rating Board based on 7 criteria and 5 categories[8] under the Broadcast Act. However, these protective measures do not apply to streaming services, thereby this paper will discuss how this has affected the media industry .

1.2 Research Significance

With the rise of digital trade – streaming service has indirectly broken down and entered the protected industry. Namely, streaming services do not abide by domestic media regulations as they are not producing nor distributing content through traditional mediums: broadcasting or cinema, but through a digital platform. Without direct legal regulations and hindrances, streaming services were able to reach a massive global audience. Namely, Netflix, a subscription video-on-demand (SVOD) service provider, started its streaming service in 2007 and reached more than 222 million global subscribers in 2022[9]. The streaming giant has continually expanded its growth by entering the global markets and offering localized content, also known as 'Netflix Originals'[10]. Anyone with access to the internet and a gadget could easily consume international content, thereby with the rising number of internet users, Netflix has gained international recognition even more amidst the Covid 19 pandemic period. Netflix's original series have received global recognition as the films and series were equally competing on one platform and fame and recognition were not misrepresented by cost production, marketing, or even importing and exporting. The borderless trade provided an equal opportunity for success in the international market, and K-content has shown a stellar performance by producing more

[6] *Ibid.*
[7] *Ibid.,* Korean government screen quota system
[8] *Ibid.,* KMBR is a public agency determining age-based ratings and the ratings are based on the following criteria: Theme, Sex/Nudity, Violence, Language, Horror, Drugs, and Imitable Behavior. And based on the 7 criteria, the KMBR then rates the films into 5 categories: All, PG-12, PG-15, R-18, and Restricted Rate
[9] Business of Apps, Netflix Revenue and Usage Statistics (2022)
[10] *Ibid.,* Today, only North Korea, Syria, China and Crimea are the countries that Netflix has not entered.

than 80 shows and films and ranking #1 on Netflix with 'Squid Game', a Netflix Original series[11]. According to Netflix, Netflix's investment in content production has contributed nearly KRW 5.6 trillion to the country's GDP and aided in creating more than 16,000 jobs[12].

However, Netflix's success has shed light on a substantial problem: Net neutrality. Net neutrality is a concept coined by Tim Wu, a Columbia law professor, where internet service providers (ISP) should enable equal and open access to all contents and applications without discrimination against products[13]. The general principle is for ISPs to treat all internet communications fairly and not intentionally block, slow down, or differentiate prices in specific online content. As Netflix's business model requires partnership with domestic broadband, telecommunication has filed complaints about Netflix's extensive amount of traffic usage, demanding a fee for the network usage. In this thesis, a case study of Netflix vs SK Broadband will be used to scrutinize the issue of net neutrality in digital trade.

II. Digital Trade

2.1 Background

Digital Trade is a broad concept encompassing sales of consumer products online, data flows that enable global value chains, services provided online, and even a myriad of other platforms and applications. At least some portion of every business is digitally traded and every industry uses digital trade as leverage to compete in the global market[14]. The term 'digital economy' was first used in the 1990s during the 'G20 Digital Economy Development and Cooperation Initiative' at the G20 Summit in Hangzhou concerning China's economic development and its policy focuses (Yue et al). And in 2016, the final statement describing the digital economy is as follows:

> [Digital Economy] refers to a broad range of economic activities that include using *digitized information and knowledge as the key factor of production*, modern information networks as

[11] Netflix, Netflix Korea, the story so far by Team Korea dated 29 September 2021.
[12] Netflix, Socio-Economic Impact of Netflix Korea. Deloitte Report.
[13] Tim Wu, Network Neutrality, Broadband Discrimination. The paper was written when Tim Wu was an associate professor of Law at, the University of Virginia Law School.
[14] Office of the United States Trade Representative (USTR), Key Barriers to Digital Trade

> an important activity space, and the effective use of information and communication technology (ICT) as an important driver of productivity growth and economic structural optimization. Internet, cloud computing, big data, Internet of Things (IoT), fintech, and other new digital technologies are used to collect, store, analyze, and share information digitally and transform social interactions. Digitized, networked, and intelligent ICTs enable modern economic activities to be more flexible, agile, and smart[15]

Until now, there is no single accepted definition of the term digital trade, but it's clear that digitalization changes trading in scale, scope, and speed in the global market, thereby developing and shifting the existing markets. Within the broad concept, global platforms are one of the most influential and common types of digital trade in our daily lives. The digital platform is a system, business model, or manager that virtually facilitates direct interactions among 2 or more user groups of independent interests: consumers and sellers, acting as a matchmaker. Digital platforms operate on a global scope and have decreased the cost of cross-border communications and transactions, enabling a borderless connection between customers and suppliers. The market for global platforms has risen dramatically over the past decade. According to Bloomberg research, among the top ten largest US companies in 2018, the top 5 companies are global platforms including Apple, Google, and Facebook[16].

[15] G20 Digital Economy Development and Cooperation Initiative (Final). https://www.mofa.go.jp/files/000185874.pdf
[16] See Figure 1

2018				2008			
Rank	Company	Founded	USbn	Rank	Company	Founded	USbn
1.	Apple	1976	890	1.	Exxon	1870	492
2.	Google	1998	768	2.	General Electric	1892	358
3.	Microsoft	1975	680	3.	Microsoft	1975	313
4.	Amazon	1994	592	4.	AT&T	1885	238
5.	Facebook	2004	545	5.	Proctor & Gamble	1837	226
6.	Berkshire	1955	496	6.	Berkshire	1955	206
7.	J&J	1886	380	7.	Google	1998	198
8.	JP Morgan	1871	375	8.	Chevron	1879	192
9.	Exxon	1870	367	9.	J&J	1886	192
10.	Bank of America	1909	316	10.	Walmart	1962	184

Source: Bloomberg, Google

<Figure 1> Largest US companies in 2018 vs 2008 (시가총액 기준)

Global platforms enter a market with a shifted digital business model that provides the same goods and services to the consumers as the traditional players. For instance, instead of going offline to buy a book, consumers can easily buy the same book online through global platforms such as Amazon or e-books, often at a lower price. Since physical goods and services are subject to taxation and regulation when crossing borders, the borderless digital trade is exempted from the existing trade laws. This caused new business models to emerge with digital technologies as their source, and digital platforms have become the new marketplace over the last decade[17]. With increasing online visibility through interactive measures such as websites, applications, and social media, global platforms have boosted online sales by utilizing interaction as a marketing strategy[18]. Furthermore, companies are increasingly relying on artificial intelligence and big data to provide customization and preferential suggestions based on consumers' profiles and their experience[19].

[17] World Trade Report 2018, Executive Summary pg 7.
[18] *Ibid.*,
[19] *Ibid.*

2.2 New Normal Perspective

From an economic perspective, a digital platform has twofold implications: linking digital transformation and platform business and connecting the consumers and sellers in a virtual marketplace. The traditional business model works in four steps: production, distribution, marketing, then to consumers, however, the platform businesses do not require separate distribution and marketing steps as it is already incorporated into their product.

One of the most affected industries due to digital trade is the media industry. As audiovisual contents are easily converted into electronic means delivered through online streaming platforms[20]. Consumers can enjoy the freedom to choose what to watch when to watch, where to watch, and how to watch films or series with media content convergence in streaming platforms[21]. As international regulations for digital trade are still in the making, streaming services are subject to following domestic regulations, or lack thereof, which are also often revised and reformed. For instance, streaming services are subject to the Telecommunication Business Act in South Korea instead of the Broadcast Act, thus, Netflix is registered as a value-added telecommunications business operator and is not considered a broadcasting service[22].

III. Media Industry

3.1 Background

With abundant ICT infrastructure and the rise of Hallyu, South Korea's media industry has flourished with global recognition with noticeable examples in films ('Parasite'), TV series ('Squid Game'), and music (BTS). A recent yet remarkable example is director Bong Joon Ho's 'Parasite', a Korean film that wrote a history in the media industry by winning the Academy Award for Best

---

[20] Kwak Dong Chul, "Digital Trade Liberalization in the Analogue Trading Regime: Three Essays on Digital Trade" *Seoul National University GSIS* (2019), pg 152.
[21] *Ibid.*
[22] Korean Law Information Center, Enforcement Decree of the Telecommunications Business Act. Chapter 1 General Provisions Article 2 (Details of Universal Service) states that 1-2 Internet access services are subject to Telecommunications Business Act

Pictures in Oscars 2020 as the first non-English language film.[23] The Hallyu wave has conquered the global audience as the Korean word 'Hallyu' was added in the Oxford English Dictionary in 2019[24]. Korean films have performed decently in the foreign market since the 1990s when the repressive military regimes ceased, which eased censorship laws and investments flooded with large Korean conglomerates: Samsung, Daewoo, and Hyundai[25]. The film industry quickly flourished with CJ Entertainment, the Orion Group (Showbox), and Lotte Entertainment dominating the South Korean movie industry[26].

The Korean film industry has endured obstacles in its early stage with strict censorship under the Japanese rule banning all Korean-speaking films and forcing producers to merge Japanese propaganda films into a single production house, thereby hindering the Korean film growth[27]. In 1945, when Korea was liberated, Hollywood films were first distributed to the public, which triggered the domestic media industry to produce sophisticated and advanced Hollywood-style films. And in the early 1990s, the Korean film industry dominated the domestic market and soon started gaining international recognition with '*Thirst'*, July Prize at 2009 Cannes Festival; '*Inside Men'*, Best Actor at 2016 Asian Film Award; *'Night Fishing',* Golden Bear for Best Short Film at 2011 Berlin Festival[28]. Within a short period, the Korean film industry achieved its competitiveness and was crowned Asia's cultural powerhouse[29] as K-contents were performing well in the international market.

---

[23] Sou-Jie van Brunnersum, Deutsche Welle. How South Korean movies are dominating world cinema. From independent films to hit series streaming on platforms like Netflix, South Korean films are capturing audiences around the world.
[24] Oxford Dictorionary, "Hallyu"
[25] Sou-Jie van Brunnersum, Deutsche Welle. How South Korean movies are dominating world cinema.
[26] *Ibid.*
[27] Parc, Jimmyn, "Evaluating the Effects of Protectionism on the Film Industry: A Case Study Analysis of Korea" pg. 349
[28] *Ibid.,* pg. 350
[29] *Ibid.*

3.2 Audiovisual Services

However, South Korea has imposed strict regulations to protect its domestic media industry. As the United States portrayed its concern under the 2022 National Trade Estimate Report on Foreign Trade Barriers by illustrating all the quotas that are subject to foreign programs[30]:

> **Audiovisual Services**
>
> In Korea, foreign programs may not exceed 20 percent of terrestrial television or radio broadcast time or 50 percent of cable or satellite broadcast time in either the first half or second half of the year. Within those overall quotas, Korea further limits broadcast time for foreign films to 75 percent of all films for terrestrial broadcasts and 80 percent for cable and satellite broadcasts. Foreign animation is limited to 55 percent of all animation content for terrestrial broadcasts and 70 percent of all animation content for cable and satellite broadcasts. Another six-month quota limits content from any one country to 80 percent of the total quota available to foreign films, animation, or music. Korea also maintains a screen quota for domestic films shown in theaters, requiring local movie screens to show domestic films at least 73 days per year[31].

Additionally, the Broadcasting Act limits the foreign share of the domestic market by limiting foreign capital and has imposed strict Review Regulations.

> **Broadcasting Act**
>
> *Chapter 2 Article 14 (Foreign capital investment and contribution)*
>
> (1) No terrestrial broadcasting business entity or community radio broadcasting business entity shall receive investment or a contribution of property from any of the following entities: Provided, that it may receive property contributions from a foreign organization

[30] United States Trade Representative, 2022 National Trade Estimate Report on Foreign Trade Barriers (NTE) is the 37th report in an annual series that highlights significant foreign barriers to U.S. exports, U.S foreign direct investment, and U.S. electronic commerce. This document is a companion piece to the President's 2022 Trade Policy Agenda and 2021 Annual Report, published by the Office of the United States Trade Representative (USTR) on March 1, 2022.
[31] *Ibid.*, Pg 323

operated for facilitating education, athletics, religion, charity, and other international friendship if it has obtained approval from the Korea Communications Commission (hereinafter KCC):

1. A foreign government or organization;
2. A foreigner;
3. A corporation, stocks, or equity shares of which are owned by a foreign government or organization or a foreigner [more than] the ratio prescribed by Presidential Decree[32].

No broadcasting business entity can receive investment or a contribution from a foreign government or organization, a foreigner, or a corporation, stock or equity shares that are owned by a foreign government or organization, or a foreigner, unless approved by Korea Communications Commission, but also a strict limitation on the stock holdings[33].

Chapter 3 Article 33 (Review Regulations)

(1) The KCC shall formulate and publicly announce rules concerning the [Review Regulations] to deliberate on the impartiality and public nature of broadcasts.

(2) Review regulations formulated under paragraph (1) shall include the following:

1. Matters concerning maintaining the fundamental democratic order provided in the Constitution, and respect for human rights;
2. Matters concerning protecting sound family lives;
3. Matters concerning protecting children and youths and sound character building;
4. Matters concerning public morals and social ethics;
5. Matters concerning gender equality;
6. Matters concerning advancing international friendship;
7. Matters concerning enhancing the rights and the interests of classes alienated by the broadcasting, such as persons with disabilities;
8. Matters concerning the prohibition against discrimination on grounds of race, nationality, region, religion, etc.;
9. Matters concerning promoting national culture and cultivating national identity;

---

32 Broadcasting Act. Article 14 (Foreign Capital Investment and Contribution) was last amended on June 09, 2020

33 Ibid., Article 14 (1) to (5)

10. Matters concerning the impartiality and public nature of news reports or commentaries;
11. Matters concerning purifying a language;
12. Matters concerning protecting the natural environment;
13. Matters concerning sound consumption and protection of the rights and interests. of viewers;
14. Matters concerning the prevention of suicide and the creation of a culture of respect for life;
15. Matters concerning items or content prohibited from commercials under statutes. or regulations;
16. Matters concerning the impartiality and public interest of commercials;
17. Other matters concerning the deliberation duties of the Korea Communications Standards Commission under this Act[34].

A broadcasting business entity is required to observe the review regulation listed above and should also rate a broadcast program to consider the degree of harmfulness of the content in terms of violence, lewdness, viewer age, etc., and indicate during broadcasting to protect children and juveniles (Broadcasting Act). These protective measures are believed for domestic movies to account for at least 50% of the domestic market share.[35]

3.3 Korean Film Council

year	South Korea					Foreign				
	Release	Screening	Revenue	Audience	Share	Release	Screening	Revenue	Audience	Share
2004	74	95	239,143,250,406	37,741,433	54.5%	206	205	201,585,655,800	31,513,193	45.5%
2005	82	116	451,707,494,794	71,346,379	57.8%	224	298	328,657,484,673	52,005,680	42.2%
2006	110	159	568,090,373,200	91,745,620	63.6%	241	322	324,351,764,800	52,510,415	36.4%
2007	111	183	479,858,559,900	75,791,003	49.9%	282	428	485,628,064,638	76,231,989	50.1%
2008	110	252	407,327,224,301	62,047,324	42.1%	270	552	554,126,072,950	85,381,315	57.9%
2009	119	211	526,482,459,500	75,644,847	48.7%	243	503	556,713,545,450	79,753,807	51.3%
2010	142	275	508,426,689,450	68,843,175	46.6%	288	521	648,828,048,800	78,916,039	53.4%
2011	152	334	613,722,968,100	82,868,189	51.9%	290	609	622,076,496,100	76,856,276	48.1%
2012	176	389	838,238,171,234	114,911,591	59.0%	465	842	616,902,183,201	79,978,996	41.0%
2013	183	491	909,933,664,105	127,292,173	59.7%	724	1,184	641,418,320,616	86,058,857	40.3%
2014	217	515	820,644,029,302	107,706,152	50.1%	878	1,437	843,588,519,858	107,362,806	49.9%
2015	257	584	879,659,395,660	112,942,129	52.0%	946	1,556	835,842,176,018	104,357,394	48.0%
2016	337	702	927,865,679,723	116,556,223	53.7%	1,237	1,913	815,328,744,647	100,469,959	46.3%
2017	495	887	902,667,642,338	113,907,210	51.8%	1,272	2,060	853,910,208,775	105,969,017	48.2%
2018	661	1,096	912,747,830,308	110,149,999	50.9%	1,210	2,088	901,215,978,930	106,235,270	49.1%
2019	697	1,126	970,793,814,451	115,622,065	51.0%	1,246	1,963	943,195,265,617	111,056,712	49.0%
2020	782	1,138	350,411,877,790	40,462,297	68.0%	1,115	1,866	159,962,840,401	19,061,670	32.0%
2021	817	1,184	173,421,908,692	18,220,100	30.1%	1,039	1,767	411,117,079,708	42,310,987	69.9%
2022	354	560	197,980,344,100	19,720,700	49.7%	464	814	201,201,177,356	19,984,101	50.3%

Table 1 <Korean Film Council: Total Audience and Revenue of South Korea and Foreign>

[34] *Ibid.,* Article 33 (Review Regulations)
[35] See Table 1

Total			
Release	Screening	Revenue	Audience
280	300	440,728,906,206	69,254,626
306	414	780,364,979,467	123,352,059
351	481	892,442,138,000	144,256,035
393	611	965,486,624,538	152,022,992
380	804	961,453,297,251	147,428,639
362	714	1,083,196,004,950	155,398,654
430	796	1,157,254,738,250	147,759,214
442	943	1,235,799,464,200	159,724,465
641	1,231	1,455,140,354,435	194,890,587
907	1,675	1,551,351,984,721	213,351,030
1,095	1,952	1,664,232,549,160	215,068,958
1,203	2,140	1,715,501,571,678	217,299,523
1,574	2,615	1,743,194,424,370	217,026,182
1,767	2,947	1,756,577,851,113	219,876,227
1,871	3,184	1,813,963,809,238	216,385,269
1,943	3,089	1,913,989,080,068	226,678,777
1,897	3,004	510,374,718,191	59,523,967
1,856	2,951	584,538,988,400	60,531,087
818	1,374	399,181,521,456	39,704,801

Table 2 <Korean Film Council: Total Audience and Revenue Total>

Since the pandemic, South Korea's filmmaking industry drastically contracted. The total revenue of the local film market, including domestic sales of movie tickets, online releases, and exports amounted to 1.02 trillion won in 2021, a 60% plunge from the pre-pandemic year 2019. Furthermore, the size of Korean-made movies marked 30.1% in 2021, a drop below the 50% level which is the first time in over a decade. The audience has also shrunk from 4.37 times in 2019 to 1.17times in 2021. However, during the difficult times, Korean content has reached a global audience with Netflix and is estimated to have brought a contribution to the GDP of 2.3 trillion won alone in 2020 (Netflix).

IV. Netflix

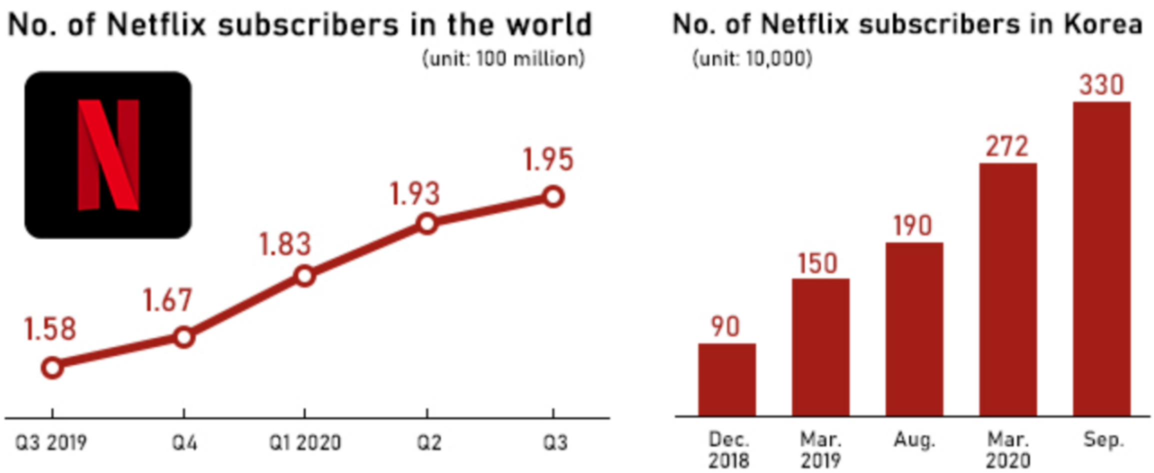
4.1 Background

Netflix is a streaming subscription-based service where users can conveniently watch content on their smart gadgets with a click of a button. The company started as a mail-order service for DVDs in 1997[36] and expanded into a streaming service in 2007. In 2013, Netflix enters into the original content business, Netflix produced TV series, films, and other audiovisuals, and in 5 years produces 90 movies for streaming[37]. As originals contents have become Netflix's key success factor, the

[36] G Keating. Netflixed: The Epic Battle for America's Eyeballs. New York, 2013
[37] L. Richwine, Cinema vs. Streaming: The battle over when and where you can see Movies. Reuters

company started to enter the global market after tasting its first success by disrupting the Hollywood market[38]. In 2016, Netflix entered the South Korean market and has become a growing force in the domestic market, reshaping the media industry.

Netflix was not welcomed by the local entertainment industry, as major players like CJ E&M and SK Telecom, denied partnerships and access to local content requests to prevent Netflix from becoming a major player (Stangarone). However, some entertainment firms licensed their shows to Netflix such as JTBC with *Man X Man, Chef and My Fridge, and Abnormal Summit,* to run an hour after it airs on the TV and LG Plus[39], in hopes to increase subscribers[40]. Within a few years, Netflix had reached seven-figure domestic subscribers and became the largest streaming platform in South Korea.



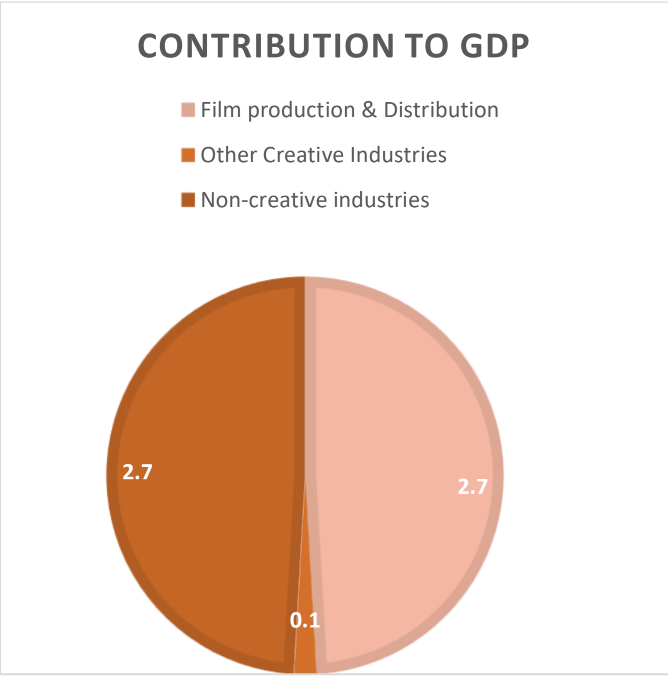
Source: Reuters

4.2 Netflix's Contribution to Korea's Economy

Starting from 2017, Netflix has invested heavily in an attempt to bring a diverse spectrum of Korean content to the global stage by producing 80 Korean Netflix Original Series as of 2020[41].

[38] Jeong Suk Joo, "Netflix and Changes in the Hollywood Film Industry", Jungwon University Dept. of International Trade. 2020 pg 37
[39] A local mobile carrier
[40] Troy Stangarone, "How Netflix is reshaping South Korean Entertainment" The streaming giant is reshaping Korean entertainment, even while boosting its popularity around the world. The Diplomat. April 29, 2019
[41] Deloitte, "The Socio-Economic Impact of Netflix Korea" Deloitte Consulting, 2021. Series or films that Netflix invested for production or produced by Korean production companies and released in Korea or overseas as a Netflix film and Series.

Netflix has invested about 770 billion won since its entrance into the South Korean market and has at least invested 550 billion won in Korean content in 2021[42]. Deloitte report[43] shows that Netflix has contributed 5.6 trillion won to GDP, 2.3 trillion in 2020 alone, and has created 16,000 jobs, 58,000 in 2020 alone. In measuring the contribution to GDP, it is divided into three categories: production & distribution, other creative industries, and noncreative industries. The production & distribution marks up 2,715 billion won induced domestic impact, other creative industries markup 111 billion won including publishing, Webtoon and comics, and music, and lastly, the non-creative industries mark up another 2,743 billion won of both domestic and exports induced impacts consisting of tourism, foods, beauty and fashion[44].



measurement: trillion won

Source: Netflix, chart made by the author

Furthermore, Netflix stresses that it works with diverse players in the creative economy to make positive impacts on, behind, and beyond the screen: shifting the ecosystem.

[42] Ibid. Kim Min Young, VP of Netflix content in Kora and Southeast Asia said: “Netflix plans to invest KRW 550 billion in Korean content in 2021 with hopes to grow together with Korea”
[43] 2016-2020
[44] Ibid. “Netflix Korea, The Story so Far: Impact Study Results”

4.3 Socio-Economic Impact

Netflix has contributed to Korean production companies' portfolio improvement, thereby creating a more sustainable business environment. Data shows that profitability has increased for production companies partnered with Netflix due to not subsiding to risk factors that depend on the success of a film/series[45]. Netflix also creates an environment where creators can solely focus on producing high-quality content. Due to restrictions in terrestrial broadcastings, creators were limited to producing content that is considered favorable in the domestic market. As Yoon Shin Ae quotes, "The number one reason for my welcoming of Netflix's entry is that we can tell more diverse stories that were difficult to cover in terrestrial broadcasting. In the past, I was concerned about whether I could make something into a drama. Now, with Netflix, I focus more on how I can make it well"[46]. The platform respects creative freedom, rookie producers, screenwriters, and actors or actresses, shows full support in production investment, and offers a systematic production environment[47]. In a way, Netflix has leveled the playing field into film-centered for all creators with talents.

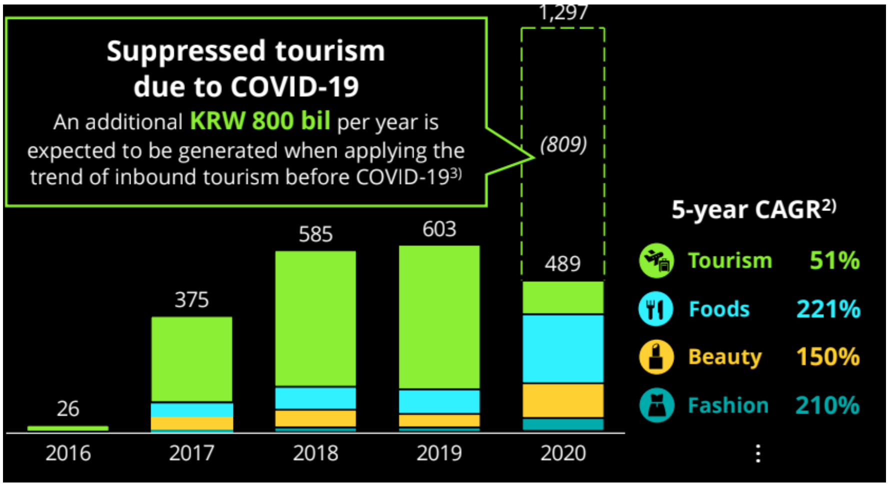
Netflix's production team provides support through the physical production stage and post-production stage to create high-quality work in a reasonable working environment. In South Korea, although not guided by law, it is a norm to compete in the entire production process before the release of a series or film, which often leads to overworking hours to meet the broadcasting schedule. However, the Netflix production team sets a specific budget and schedule to comply with legal working hours[48]. With increased investments from Netflix, Korea's VFX studios have shown a fourfold increase in revenue[49]. The VFX technologies were initially used for large-scale movie production, however, with Netflix's principle to produce all shows and films in 4k to enhance viewer experience and quality, the technology is now used for drama production as well. From 2010 to 2015 (pre-Netflix era), the VFX generated an average of 5 billion won revenue with 5 studios in the market. In 2020, with a diverse project portfolio and increased technical level, the average annual revenue

---

45 Ibid., pg 15
46 Yoon Shin Ae is the CEO of Studio 329, a production company for 'Extracurricular', which is Netflix's Original show.
47 Systematic production environment: 1 year of pre-production system to complete content prior to its release and technical support and quality control by Netflix internal production team
48 Ibid., pg 19
49 Ibid., pg 20

reached 15 billion won with 9 studios in 2020 [50]. Another industry that was positively impacted was the dubbing and subtitle industry thanks to the localization strategy. As Netflix provides localized content to 190 countries with authentic and high-quality dubbing and subtitles, the quality of the screen translation industry improved dramatically [51].

With global coverage, Netflix acts as the main channel for consuming international content. K-drama and movies are exposed to international viewers through Netflix as the main source, amounting to more than 60%[52]. 12 Korean shows have reached the Top 10 in 80 countries, according to Netflix, excluding the famous '*Squid Game*'[53]. '*Squid Game'*, a Netflix original TV show directed by Hwang Dong-Hyuk, is the most popular original series ever[54]. '*Squid Game'* has reached 111 million viewers, at least 2-minute watch, in the first 28 days of its release, with a gap of 29 million to the former #1 series, '*Bridgerton*'[55]. The dominant performance is a rare occasion on the Netflix platform as the gap between the Top 10 most-watched only differs in 1 to 10 million at most. With a staggering 1.65 billion hours of viewing in the first 28 days, '*Squid Game'* delivered $891 million as an impact value in return for Netflix's $21.4 million investment for the show (Spangler). Moreover, the K-culture ripple effect caused by Netflix is estimated to add 800 billion won when applying the trend of inbound tourism of the pre-covid era.



[50] Ibid.
[51] Ibid., Official from IYUNO, subtitling/dubbing company quotes
[52] Ibid., pg. 24
[53] *Alive, Sweet Home, It's Okay to not be Okay, The Call, Start-up, The King: Eternal Monarch, Record of Youth, Crash Landing on You, Hospital Playlist, Was it Love?, Mystic Pop-up Bar, Stranger*
[54] Paul Tassi, "'Squid Game' Is Now Netflix's Most Popular Show Ever, And It's Not Even Close" Forbes, Oct 13, 2021
[55] Ibid.

Source: Deloitte Analysis[56]

Korea has the potential to reach a global audience and recognition without the need for global platforms, with one caveat: investment. CJ Entertainment has backed *Parasite* with immense investment as they poured more than $10 million for the Academy Campaign alone as an investment distributor (Kim). As the Academy Awards are voted by 8400 members of the US Academy of Motion Picture Arts and Science (AMPAS) members, it is essential to gain the votes of the opinion leaders. The competitiveness of this system is also known as the Hollywood Campaign as it resembles the presidential campaign.

Although *Parasite* won the Oscars Awards with its mesmerizing content, without the investment of CJ, it would not have reached the high ceiling of entering the Oscars. It all comes down to investment. As seen above, Netflix has shown great success in producing original content with paramount investments. Unlike the global platform, Korea has shown weak investment when it comes to promoting the Korean media industry to the global audience[57]. So, unless South Korea can invest as much as Netflix can, it is ideal that Korean content is shared worldwide through the digital platform, as an opportunity cost.

4.4 Classifications under KORUS FTA

While Netflix and Internet Protocol Television (hereby IPTV) compete in the same audiovisual market, the two are categorized differently: value-added telecommunication services and traditional broadcasting, respectively. As a value-added telecommunication service, Netflix benefits from deregulation while IPTV suffers from heavy regulations abiding by the Broadcasting Act (Lie, Han-Young). Research shows that streaming services and IPTV are of the same nature and essential attributes in that they both have programming autonomy for the audience, but only differs in technological means for the supply of services[58]. The only clause in the KORUS FTA that the South

[56] See full Deloitte analysis for research methodology
[57] Youna Kim, "The Soft Power of the Korean Wave: Parasite, BTS and Drama" Routledge 2022
[58] Lie Han Young, "Korea's Trade-friendly Policy Direction for Regulatory Synchronization between OTT and IPTV. Chung-Ang University, www.kci.go.kr 2021. "Unfortunately, Korea's obligation to comply with the Korea-US FTA shows that domestically, there is very limited room for harmonizing the strength of OTT regulations to a level equivalent to that of IPTV. This is because, in contrast to broad regulatory discretion on

Korean government can use as leverage to regulate the streaming service is the 'reservation for future measurement' under KORUS FTA Annex II-Korea-33 Sector: Digital Audio or Video Services[59]:

Description: Cross-Border Trade in Services and Investment

Korea *reserves the right* to adopt any measure to ensure that, upon a finding by the Government of Korea that Korean digital audio or video content or genres thereof are not readily available to Korean consumers, access to such content is not unreasonably denied to Korean consumers. Concerning digital audio or video services targeted at Korean consumers, Korea reserves the right to adopt any measure to promote the availability of such content.

For purposes of this entry, digital audio or video service means a service that provides streaming audio content, films, or other video downloads or streaming video content regardless of the type of transmission (including through the Internet), but does not include broadcasting services as defined by the Broadcasting Act as of the date this Agreement enters into force or subscription-based video services as defined in the Communications Services – Broadcasting and Telecommunications Services entry in Korea's Schedule to Annex II.

According to Lie Han Young, a professor in the Department of Economics at Chung-Ang University, the South Korean government has practically opened up the streaming service market for the U.S. streaming services companies to enter under the KORUS FTA without any regulations[60], which accounts for the massive success of the streaming giant, Netflix.

IPTV, the scope of regulatory discretion on OTT is extremely narrow. While the Korean government adhered to the policy of actively protecting the market by considering TV broadcasting based on the Internet protocol as part of the traditional broadcasting service even at the time of the Korea-US FTA negotiations, it was appropriate for the OTT market, where the reality was not clearly revealed. It means that there is no provision". Translated by author

[59] KORUS FTA

[60] *Ibid.*, "This means that the Korean government has opened the streaming market to a level that is close to being fully open to American global online platforms such as Netflix with the KORUS FTA. The narrow scope of future reservations for streaming platform is explained by the fact that streaming platforms had not yet appeared on the market at the time of the KORUS FTA negotiations. Simply put, due to the absence of

V. Net Neutrality

5.1 Legal Battle of SK Broadband vs Netflix

Internet business models were designed before streaming services, and streaming videos account for up to 80% of network capacity which is a burden for broadband companies. SK Broadband (SKB) is a South Korean broadband provider whose claim is that Netflix should pay a network fee for increased traffic. In May 2018, Netflix's usage of SKB was 35 gigabits per second (Gbps) and the two parties agreed to interconnect via Tokyo's Internet exchange BBIX. SKB paid the installation cost of the international network between Korea and Japan, about 600 miles, and Netflix paid for the caching cost of its contents between Japan and the US using its OCA[61]. However, Netflix's traffic continually increased and SKB had to expand its international network capacity at its own expense. By October 2018, Netflix traffic reached 50Gbps and SKB requested Netflix to pay network usage fees for international network capacity between Tokyo BBIX and South Korea and its domestic network usage. And Netflix responded by offering OCA installation in SKB's Korean network facility and refused to pay the network usage fee. So, in November 2019, SKB applied for adjudication to the Korea Communications Commission requesting a negotiation on the following matter of payment to set up the international network and domestic network usage. Netflix responded by filing a lawsuit against SKB in April 2020 that they are not accountable and have no obligation to negotiate or to pay for transmission, operation, expansion, or use of SKB's network (Layton).

Netflix argues that SKB does not provide access service but only a delivery service and that delivery of content is free of charge. SKB responded that they offer both access and dedicated network service and that Netflix profits from transmitting data to users through SKB's network. Also noting that in January 2020, Netflix traffic exceeded fourfold, 200Gbps, and added interconnection in Hong Kong. The court rejected Netflix's arguments, dismissed the case, and ruled that Netflix pay litigation cost as SKB provides Netflix an exclusive and dedicated network for its traffic for Netflix subscribers to receive a reliable and high-quality network experience. Netflix traffic on SKB's

---

streaming platforms, it was difficult to expect measures the commercial significance for future reservations." Translated by author.

[61] Open Connect Appliance, a type of content delivery network

network increased 8fold in two years and SKB suffered from a significant cost to transmit the traffic. The court, however, did not specify the amount for network usage but offered negotiation between the two parties in compensation terms and ordered a monetary payment once the negotiation fails. Also, important to note is that Naver and Kakao, the two main internet traffic users take up to 1-2% of Korea's internet traffic and pay $57 million to $82 million annually to local broadband providers. Domestic internet traffic users pay about 1-2% of their sales, but the video platform, Afreeca TV[62], pays about 20% of its sales as a network usage fee[63]. However, international corporations do not pay this fee despite consuming more network traffic, which raises the issue of discrimination within like products. According to the Korea Communications Commission (KCC), Netflix's traffic on SKB's network is now 1300Gbps, consuming 7.2% of South Korea's total network capacity. If the same cost equation is applied to Netflix as the domestic CPs, it should pay around $104 million per year. This is the main argument of SKB. Furthermore, even with an 8-fold increase in traffic, SKB successfully provided stellar service as subscribers did not experience any degradation in Netflix experience (Layton).

The case of Netflix vs SK Broadband is an important battle that will shift the paradigm of network and streaming giants as either party's winning will be a precedent for all other countries. The court ultimately sided with SKB to charge Netflix with a 'network usage fee', which stirs up controversy about 'network neutrality'. Some scholars argue that network usage fees will create an opportunity for ISPs to increase prices and reap monopoly profits, and others say that charging content providers for access threatens the principle of freedom of speech (Kim). Roslyn Layton[64], an international expert on technology policy, comments that SKB's stance is understandable and normal since it's a two-sided business transaction. As an expert in net neutrality, she says that since not all

---

[62] Afreeca TV is the most famous video platform in South Korea, the platform is operated by 1 person media where anyone can live stream without special technology or tools

[63] Chung, Dong Hun, "The Debate on Net Neutrality: Evidence, Issue and Implementations". Kwang-Un University. 2018. Pg 15

[64] Rosalyn Layton is a Senior Vice President of Strand Consult, an independent consultancy serving the global mobile telecom industry. She is also a Visiting Researcher at Aalborg University Copenhagen where she earned a doctoral thesis on network neutrality. She served on the Presidential Transition Team for the Federal Communications Commission (FCC), and her work was critical to the FCC's defense of the Restoring Internet Freedom Order. Finally, she is a Senior Contributor to Forbes.

SKB users are Netflix subscribers, the end-users, being Netflix, should be responsible to compensate for the amount that broadbands had invested in order to provide a stable service[65].

5.2 Telecommunication Business Act

To address the ongoing issue, South Korea has amended Article 22.7 of the Telecommunication Business Act[66] (Proposed Enforcement Decree), and corporations that are subject to Article 22.7 are listed under Article 30.5[67].

Value-Added Telecommunications Service Providers (VSP) subject to pursuing the Proposed Enforcement Decree is required to meet all the following:

**Immediate three months preceding the end of the previous year*

1. Daily domestic users shall be one million or more on average;
2. Daily domestic traffic shall account for 1 percent or more on average of Korea's total internet traffic[68].

Under the Proposed Enforcement Decree, "necessary measures" shall be undertaken by VSPs to secure means of the stability of service by following measures that are in their scope of authority and responsibility:

1. Implement technical measures to prevent excessive traffic congestion and technical errors (e.g., redundancy of servers and optimization of content transmission volume);
2. Secure measures to stabilize server capacity, uninterrupted internet connection, data traffic route, and traffic volume fluctuation trends;

[65] Beverly Hallberg and Roslyn Layton, "Roslyn Layton: Is Netflix Getting a Free Ride on Broadband Networks? She Thinks Podcast, April 08, 2022

[66] Telecommunications Business Act [Enforcement Jun. 10, 2022] Article 22-7 (Securing service stability, etc. of value-added telecommunication service providers) In order to provide the service, necessary measures prescribed by Presidential Decree, such as securing means of service stabilization and handling of user requests, shall be taken. [This article is newly established on 2020. 06.9] Translated by Author

[67] Ibid., Article 30-5 (Measures to Securing Service Stability, etc. of Value-Added Communication Business Operators) In Article 22-7 of the 1st Act, "value-added communication service provider that meets the standards prescribed by Presidential Decree" means a value-added communication service provider that meets all of the following requirements. Translated by author

[68] Kim&Chang, New Requirement and Enhanced Obligations for Value-Added Telecommunications Service Providers to Secure Means for Stability of Service. 2020.09.28

3. In implementing the measures described above (2), consult with relevant service providers, including the facility-based telecommunications service providers, and in case of unstable service such as a change in a traffic route, notify the service provider in advance; and
4. Establish its guidelines on the provision of stable telecommunication services.[69]

However, there are currently no laws or regulations that explicitly mandate the net neutrality of online service providers in South Korea, and perspectives on net neutrality differ among internet service providers and content and application providers[70].

In response to the Proposed Enforcement Decree, USTR stressed that online streaming services are not subject to the existing legacy limits listed in KORUS FTA[71].

> KORUS protects against quota increases in the allocation to domestic content and ensures that new platforms, such as online video and streaming music, are not subject to these legacy limits. Notwithstanding this commitment, multiple Korean Government agencies and the National Assembly have been discussing ways to incorporate online media streaming platforms into the existing restrictive regulatory framework for legacy media, including potential local content requirements for U.S. over-the-top platforms. In addition, in the summer of 2021 various legislators introduced bills in the National Assembly seeking to oblige content providers to pay Internet service providers "network usage fees." Such legislation, if enacted, would raise concerns [about] Korea's international trade obligations. The United States will continue to monitor Korea's legislative efforts in this regard.

As the report shows its concern, the US is strongly opposing South Korea's imposing of a 'network usage fee'. Under the current Biden administration[72], full reinstatement of Net Neutrality at a federal

[69] *Ibid.*

[70] Telecommunication Business Act are in premise on the principle of net neutrality and the Ministry of Science and ICT has published two sets of guidelines related to net neutrality

[71] United States Trade Representative, 2022 National Trade Estimate Report on Foreign Trade Barriers

[72] In 2015, FCC Chairman Tom Wheeler spearheaded the passage of the FCC's Open Internet Order, a piece of legislation that designated the internet as a utility, giving the agency the power to enforce its Net Neutrality guidelines. Under these laws, it became illegal in the US to offer paid prioritization of online services. This essentially forbade companies from slowing, blocking, or detrimentally impacting a competing company's services via their control over the hardware that powers the internet. However, this was immediately dismantled under the Trump Administration and replaced with Restoring Internet Freedom Act, removing essentially all legal penalties related to the throttling or blocking of access to competing online services. Then, President Biden

level is to be amended (Gariffo). Even if South Korea successfully rules in favor of SKB and Netflix is forced to pay a network usage fee, it is clear from the statement above that the US is against the ruling and will bring this issue as a problem. This may lead to a commerce issue as the US explicitly mentioned ‘KORUS FTA’ and ‘Network Usage Fee’, which implies that US may raise this issue as a serious matter.

5.3 Validity of Broadbands

To justify SKB’s stance, a study was conducted to test if, in fact, broadbands were suffering from unjustified trafficking caused by streaming services. A study showed that streaming services have (1) indeed caused an excessive increase in the Internet network traffic in a short period as their business structure is centered on massive video trafficking, and (2) ISP bears the significant cost of investment in the network to prevent internet network quality deterioration, and (3) if the current trend of streaming service proliferation continues, ISP will inevitably have to compromise the quality of the internet network due to excessive investment cost[73]. In the result section, it is proven that streaming services do affect SKB’s internet outbound traffic of increase an average of 653,045 terabytes[74]. This means that with the increased internet traffic, the ISP is required to invest additional resources to maintain the quality of the internet network. To be more specific, it requires 16,016 won for every 1 terabyte[75].

Assuming the first expression is streaming services’ internet traffic usage and the second being outbound track of 1 terabyte increase, the equation below generates the additional investment cost.

$$\beta_2 \times \gamma_1 = OTT \text{ cost}$$

653,045 terabyte X 16,016 won = 10,455,250,450 won[76]

---

signed an executive order in July 2021 that includes the adoption of ‘Net Neutrality’ similar rules with those previously adopted during the Obama administration.

[73] Jeong Ho Kwang and Seung Young Nam, “The Proliferation of OTT services, ISP’s Revenue Model, and Sustainable Internet Ecosystems” Hoseo University. 2021. Pg 2

[74] Ibid., See Annex 1

[75] Ibid., pg 16

[76] Ibid., pg 17, refer to the source for more details on data extraction

Under the above assumption, SKB had invested an additional 10.4 billion won quarterly due to traffic increase from the streaming services [77].

Another reason that validates broadband's stance is that net neutrality's definition is outdated and should be redefined as it is outdated and not applicable with advanced technology. Conflict of interest between the ISPs and CPs are directly related to consumer benefits and costs, and as digital transformation including big data, Artificial Intelligence, the Internet of Things, etc. is developed based on the 5G network, it continually requires resources and investments (Chung). The cost to maintain network infrastructure to maintain digital transformation is currently burdened on ISPs, as CPs use net neutrality as a shield to not partake in the additional cost. As mentioned above, the network traffic dramatically increases every year with rising CPs and new technologies, so which seems only fair for the CPs to pay for the increased traffic that they have caused. Simply put, if broadband increases their payment towards their customers to compensate for their investment, non-Netflix users are also bound to this payment despite not using the platform.

5.4 The United States and European Union's Stance

Net neutrality has been a perennially challenging issue for the Federal Communications Commission (FCC) due to the legal classification of the broadband internet access service (BIAS) under the Communications Act of 1934 (Linebaugh). FCC will be given different levels of regulatory authority depending on classifying a service as a "telecommunications service" or an "information service", prior classification will have broader authority where the latter is limited. So, the FCC has alternated between the two classifications in the early years but ultimately was treated as information service[78]. The overall timeline is as follows:

2005: FCC adopts a policy statement proclaiming that consumers are entitled to lawful internet content, applications, and services of their choice

[77] Ibid., pg 17

[78] Congressional Research Service, Net Neutrality Law: An Overview. 2022. The US Supreme Court upheld the FCC's classification of cable BIAS in its landmark 2005 decision in *National Cable & Telecommunications Association v. Brand X Internet Services.*

2010: The US Court of Appeals for the District of Columbia Circuit rejects the FCC's effort to enforce this policy statement against Comcast (BIAS provider) in *Comcast v. FCC*, affirming that FCC failed to ground in its regulatory authority. The FCC then issued a new order (2010 Order) adopting binding rules on internet openness, basing its authority for the 2010 Order on Section 706 of the Telecommunications Act[79].

2014: DC Circuit rules against FCC in *Verizon v FCC*, overturning the anti-blocking and discrimination rules[80], where FCC responded by issuing the 2015 Open Internet Order, thereby reclassifying BIAS as a Title II telecommunications service.

The 2015 Open Internet Order imposes three rules designed to strengthen net neutrality, prohibiting BIAS providers from[81]:

1. "blocking" lawful content, applications, services, or non-harmful devices;
2. "throttling" (i.e., impairing or degrading) lawful internet traffic on the basis of content, applications, services, or non-harmful devices; and
3. engaging in "paid prioritization," defined as favoring some internet traffic over others in exchange for consideration.

*The order established the "General Conduct Rule" which prohibits BIAS providers from unreasonable interference or disadvantage for users accessing contents or services of their choice[82]

2017: adopted "Restoring Internet Freedom' (RIF Order) under Trump Administration, reclassifying BIAS as an information service[83]

---

[79] The FCC based its authority for the 2010 Order on Section 706 of the Telecommunications Act, a non-Title II provision that directs the Commission to "encourage the deployment on a reasonable and timely basis" of "advanced telecommunications capability." 17 The 2010 Order imposed a transparency requirement on BIAS providers and prohibited them from blocking or discriminating against lawful internet traffic, services, or devices

[80] The court held that the anti-blocking and discrimination rules treated BIAS-providers as common carriers, which is prohibited under the Communications Act unless they are classified as telecommunications carriers subject to Title II.

[81] Congressional Research Service, Net Neutrality Law: An Overview. 2022.

[82] Ibid.

[83] Eliminated the bright line rules and the General Conduct rule, leaving in place only a transparency rule applicable to bias provider

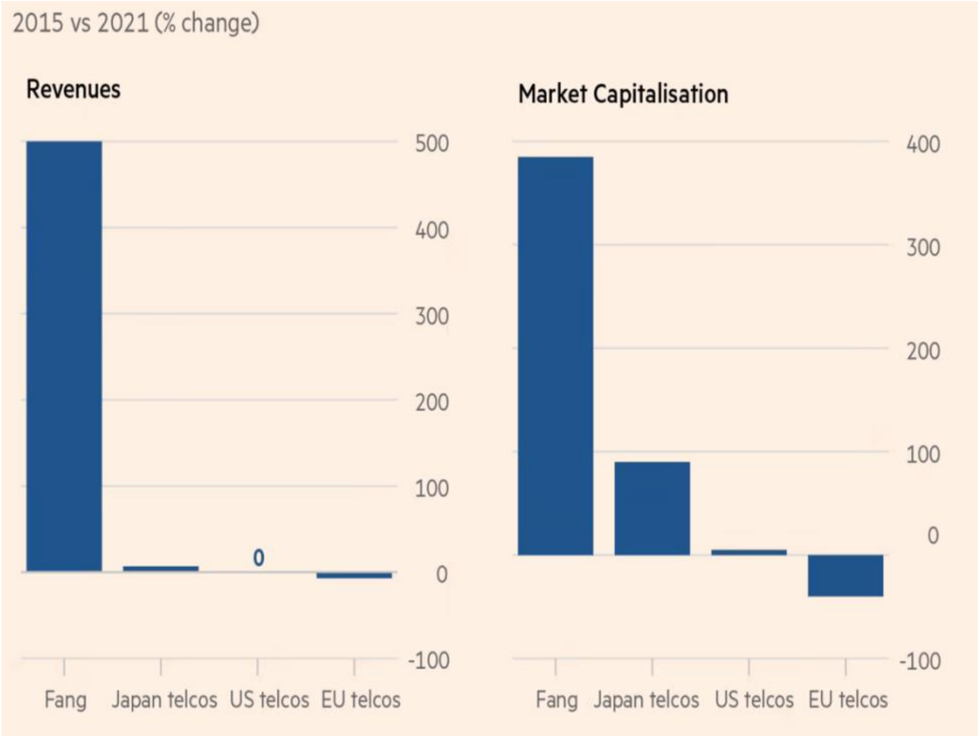
*BIAS providers were subject to transparency requirements, antitrust laws, and consumer protection laws, and found the 2015 Open Internet Order's net neutrality rules unnecessary[84]

Although the US has strongly opposed the 'network usage fee' of SKB, FCC still has not fully defined the regulations for net neutrality in its domestic stance. As the timelines tell, regulations for net neutrality and categorizing BIAS are still an ongoing battle in the US.

According to European Telecommunications Network Operators' Association, big tech companies—Meta, Netflix, and Amazon account for more than 55% of all traffic on mobile and broadband networks, costing European telecommunication companies ranging from 15 billion euros to 28 billion euros annually (Gross). Hypothetically, if tech companies paid 20 billion euros to telecom companies and increased network investment, it can create 840,000 new jobs by 2025 and also reduce energy consumption. As Lise Fuhr, director general of ETNO[85] quotes, "We want to launch an open dialogue with policymakers, consumers and tech companies on how to address the specific imbalances in internet traffic markets". This is not the first year that EU has brought up the issue of the big tech companies share of burden for the internet network. Since big tech companies are the main source of the network data, they should be somewhat reliable in the costly upgrades to infrastructure and share the burden of broadband carriers.

[84] *Ibid.*

[85] European Telecommunications Network Operators' Association



Source: Financial Times

As seen in the graph, telecommunications have weak growth in comparison with the big tech companies. Reports show that the most effective way is to make Big Tech companies make direct payments towards infrastructure projects of telecom groups (Gross). The report further shows that European telecoms have invested more than 500 billion euros in the past decade to improve their networks, and have ranked in a much weaker financial position compared to the tech sector, as the top 8 have a market capitalization of 240 billion euros while top 6 tech groups have more than 7 trillion euros (Gross).

According to Deloitte Report, South Korea is world-leading in terms of infrastructure digitalization and promotes the development of cross-border e-commerce from the perspective of its national strategy[86]. Given this as a backdrop, it is not uncanny that South Korea's broadband was the first to, somewhat successfully, charge streaming service for a network usage fee. The concept of network neutrality has been coined more than a decade ago when big tech companies were still an infant or non-existing period when internet usage was not affecting telecommunications to invest billions of dollars into maintaining their network quality. Therefore, the ground for negotiations

[86] Deloitte, Technology-empowered Digital Trade in the Asia Pacific

should be opened between the two sectors: telecommunications and streaming services, in order to provision regulations or guidelines to be drafted by the government.

VI. Conclusion

Digitalization, globalization, and pandemic have created new norms for people with social distancing and lockdowns. As people were physically unable to enjoy cultural activities, global platforms met their heyday amidst falling traditional industries. Digitalization has made cultural trade easily accessible as the case study of Netflix proves. Netflix seems to have connected all people around the world amidst lockdowns and social distancing through its digital platform and increased globalization in the process as more people are exposed to different types of content -- experiencing different cultures and countries without physically traveling.

Global platforms easily enter traditional markets and shift their paradigm, thereby threatening the market share and increasing competition to another level. However, in this case, Netflix and the South Korean media industry created a synergy effect of promoting k-media globally and making a noticeable contribution to the GDP. However, this is highly indebted to the streaming services being exempted to abide by strict domestic and international governmental regulations like the Broadcasting Act, due to their stance as value-added telecommunications business operators instead of broadcasting services. Secondly, the streaming service, not being an end-user, uses net neutrality as their defense to disregard telecommunications' suffrage from maintaining the network quality that streaming services are responsible for.

South Korea is world-leading in terms of infrastructure digital trade and promotes digital trade development from the perspective of its national strategy. With this backdrop, it is not uncanny that South Korea's broadband is not the first to, somewhat successfully, charge streaming service for a network usage fee. The concept of net neutrality has been coined more than a decade ago when big tech companies were still an infant or non-existing period when internet usage was not affecting telecommunications to invest billions of dollars into maintaining their network quality.

The South Korean government should embrace global digital trade norms and the domestic digital trade policy should be rule-based. South Korea needs to be more active in pursuing digital trade agreements, including upgrading e-commerce or digital trade chapters in existing FTAs, digital trade agreements, and the revision of data regulation and scopes, to strengthen cooperation with leading economies, the US and EU in digital technology and infrastructure.

With the case study of Netflix, this thesis was able to see two impacts that digital trade has brought to South Korea’s media industry under the circumstance that governmental and international regulations play a role in the success and hardships of digital corporations and their inseparable2 relationship with the telecommunications.

VII. Abstract in Korean

디지털통상은 상품과 서비스의 소비 방식을 오프라인에서 온라인으로 전화하여 전자적 수단을 통한 국경 없는 거래를 증가시키고 있다. 현 무역 규정은 여전히 물리적 상품 대상으로만 제한적이기 때문에, 디지털 형태로 거래되는 서비스는 기존 규정에 준수 할 의무가 없는 상황이다. 본 논문은 디지털 무역의 넓은 범위를 고려하여 시청각 콘텐츠, 통신 및 정부와 상호 연관성이 높은 스트리밍 서비스인 넷플릭스 (디지털 거래 콘텐츠) 에 초점을 맞출 것이다. 한국의 미디어 산업에는 한미 FTA, 방송법 등 국내 산업 보호를 위해 강한 정부 규제가 존재하지만, 온라인 스트리밍 서비스는 부가통신서비스 자격으로 탈규제 수혜를 받는다. 즉, 국내 제작 미디어 콘텐츠가 넷플릭스와 협업을 할 시, 국가 규정을 준수하지 않아도 되는 실상인 것이다. 또한, 코로나바이러스감염증-19 의 대유행으로 인해 사회적 거리 두기가 실행이 되면서 영화관들이 폐쇄되고, 1 인 평균 상영 편수가 급격히 감소하여 한국 영화 시장에 상당한 타격을 입혔다. 이러한 이유들로 인해 넷플릭스와 협업을 원하는 국내 제작자들은 나날이 늘어나기 시작했다. 넷플릭스는 지리적, 언어적, 문화적, 그리고 특히 규제적 관계성을 줄이는 사업 형태를 가지고 있다. 본 논문은 디지털 통상이 국내 미디어 산업에 가져온 직간접적 영향 두 가지를 각각 다룰 예정이다: 1) 탈규제의 수혜자인 넷플릭스는 뒷문을 통해 국내 시장에 진출하여 국내 미디어 시장의 생태계를 교란하고 있다. 2) 넷플릭스의 예상치 못한 진입에 따른 부수적 피해로 망 중립성에 대한 원칙이 수면 위로 떠오르고 있다. 이를 다루기 위해 통신, 정부, 스트리밍 서비스의 3 중 관계에 대한 분석을 통상적인 관점으로 풀어낼 것이다.

Annex 1

Dependent Variable: OUTBOUND				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
모바일 가입자 (MOB_SUB)	0.107563	0.067904	1.584053	0.1240
인터넷 가입자 (INT_SUB)	1.377406	0.108972	12.63999	0.0000
넷플릭스OTT 더미 (OTT_D)	653045.1	133593.4	4.888302	0.0000
상수항 (C)	-8106459.	1759864.	-4.606299	0.0001
R-squared	0.957976	F-statistic	220.3580	
Adjusted R-squared	0.953628	Prob(F-statistic)	0.000000	

Annex II: Measuring the Information Society Report 2017

Regional IDI rank	Economy	IDI	Global IDI rank
Europe			
1	Iceland	8.98	1
2	Switzerland	8.74	3
3	Denmark	8.71	4
4	United Kingdom	8.65	5
5	Netherlands	8.49	7
36	Montenegro	6.44	61
37	Turkey	6.08	67
38	TFYR Macedonia	6.01	69
39	Bosnia and Herzegovina	5.39	83
40	Albania	5.14	89
Asia and the Pacific			
1	Korea (Rep.)	8.85	2
2	Hong Kong, China	8.61	6
3	Japan	8.43	10
4	New Zealand	8.33	13
5	Australia	8.24	14
30	Bangladesh	2.53	147
31	Pakistan	2.42	148
32	Kiribati	2.17	154
33	Solomon Islands	2.11	157
34	Afghanistan	1.95	159
The Americas			
1	United States	8.18	16
2	Canada	7.77	29
3	Barbados	7.31	34
4	St. Kitts and Nevis	7.24	37
5	Uruguay	7.16	42
31	Guatemala	3.35	125
32	Honduras	3.28	129
33	Nicaragua	3.27	130
34	Cuba	2.91	137
35	Haiti	1.72	168

Regional IDI rank	Economy	IDI	Global IDI rank
Arab States			
1	Bahrain	7.60	31
2	Qatar	7.21	39
3	United Arab Emirates	7.21	40
4	Saudi Arabia	6.67	54
5	Oman	6.43	62
15	Syria	3.34	126
16	Sudan	2.55	145
17	Mauritania	2.26	151
18	Djibouti	1.98	158
19	Comoros	1.82	164
CIS			
1	Belarus	7.55	32
2	Russian Federation	7.07	45
3	Kazakhstan	6.79	52
4	Moldova	6.45	59
5	Azerbaijan	6.20	65
6	Georgia	5.79	74
7	Armenia	5.76	75
8	Ukraine	5.62	79
9	Uzbekistan	4.90	95
10	Kyrgyzstan	4.37	109
Africa			
1	Mauritius	5.88	72
2	Seychelles	5.03	90
3	South Africa	4.96	92
4	Cape Verde	4.92	93
5	Botswana	4.59	105
34	Burundi	1.48	172
35	Guinea-Bissau	1.48	173
36	Chad	1.27	174
37	Central African Rep.	1.04	175
38	Eritrea	0.96	176

VIII. Bibliography

Book

Kim, Youna. *Soft Power of the Korean Wave: Parasite, BTS and Drama*. Abingdon, Oxon: Routledge, Taylor & Francis Group, 2022.

Thesis

곽동철 and 안덕근. "아날로그 체제 하의 디지털무역 - 디지털무역 자유화와 무역협정의 역할" 통상법률 no.131(2016) : 51-90.doi: 10.36514/itl.2016..131.003

곽정호, 남승용. 2021. OTT 서비스의 확산과 ISP 수익모델에 관한 연구. 정보통신정책연구 28, no.3:1-20

이제희. "부가통신사업자의 서비스 안정성 의무에 대한 고찰" 법조 70, no.4 (2021) : 111-135.doi: 10.17007/klaj.2021.70.4.004

이한영 . “OTT 와 IPTV 간 규제 동조화를 위한 우리나라의 통상친화적 정책방향” 과학기술법연구 27, no.3 (2021): 3-39. doi: 10.32430/ilst.2021.27.3.3

Chung, Dong-Hun. “The Debate on Net Neutrality: Evidences, Issues and Implications.” *Informatization Policy* 25, no. 1 (March 30, 2018): 3–29. doi:10.22693/NIAIP.2018.25.1.003.

Jeong Ho Kwak, Seung Yong Nam. 2021. The Proliferation of OTT Services, ISPs' Revenue Model, and Sustainable Internet Ecosystems. Korean Telecommunications Policy Review28, no.3:1-20

Jeong-Suk Joo. 2020. Netflix and Changes in the Hollywood Film Industry. Journal of Industrial Convergence 18, no.5:36-41

Tim Wu, Network Neutrality, Broadband Discrimination, JOURNAL OF TELECOMMUNICATIONS AND HIGH TECHNOLOGY LAW, VOL. 2, P. 141, 2003 (2003).

Yue, H., Yaoy, N., Zhou, X., & Hua, Z. (2020). *An empirical analysis on influencing factors of digital economy* [Paper presentation]. 2020 Management Science Informatization and Economic Innovation Development Conference (MSIEID).

Websites and Journals

Beverly Hallberg and Roslyn Layton. "Roslyn Layton: Is Netflix Getting a Free Ride on Broadband Networks?: IWF." Independent Women's Forum, April 7, 2022. https://www.iwf.org/2022/04/08/roslyn-layton-is-netflix-getting-a-free-ride-on-broadband-networks/.

Brunnersum, Sou Jie van. "How South Korean Movies Are Dominating World Cinema: DW: 02.03.2022." DW.COM. Deutsche Welle, March 2, 2022. https://www.dw.com/en/how-south-korean-movies-are-dominating-world-cinema/a-60987822.

"Digital around the World - Datareportal – Global Digital Insights." DataReportal, April 2022. https://datareportal.com/global-digital-overview.

Eun, Hyun Ho, Dukjoong Na, and Kim&Chang. "The Media and Entertainment Law Review: South Korea." The Media and Entertainment Law Review - The Law Reviews. The Law Reviews, December 8, 2021. https://thelawreviews.co.uk/title/the-media-and-entertainment-law-review/south-korea.

Gariffo, Michael. "What Net Neutrality Is and How It Affects Streaming Services." MUO. Make Use Of, July 27, 2021. https://www.makeuseof.com/what-is-net-neutrality-how-it-affects-streaming-services/#:~:text=A%20lack%20of%20Net%20Neutrality,artificially%20introduce%20obstacles%20and%20limitations.

Gross, Anna. “European Telcos Seek Network Investment from Big Tech and Streamers.” Subscribe to read | Financial Times. Financial Times, May 1, 2022. https://www.ft.com/content/2004d2df-c9c1-4876-bb56-4c42f80f4093.

Iqbal, Mansoor. “Netflix Revenue and Usage Statistics (2022).” Business of Apps, June 8, 2022. https://www.businessofapps.com/data/netflix-statistics/.

“Key Barriers to Digital Trade.” United States Trade Representative, 2021. https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2017/march/key-barriers-digital-trade.

Kim, boram. “S. Korean Film Market Shrinks 2 Yrs in Row in 2021 amid Protracted Pandemic.” Yonhap News Agency. Yonhap News Agency, February 22, 2022. https://en.yna.co.kr/view/AEN20220222011600315.

Kim, Caitlin. “Can Netflix Win on Neutrality?” The Regulatory Review, November 9, 2021. https://www.theregreview.org/2021/11/10/kim-can-netflix-win-neutrality/.

Netflix. “Netflix Korea, The Story so Far.” About Netflix. Netflix, September 29, 2021. https://about.netflix.com/en/news/netflix-korea-the-story-so-far.

“New Requirement and Enhanced Obligations for Value-Added Telecommunications Service Providers to Secure Means for Stability of Service - Kim & Chang.” New Requirement and Enhanced Obligations for Value-Added Telecommunications Service Providers to Secure Means for Stability of Service - Kim & Chang. Kim&Chang, September 28, 2021. https://www.kimchang.com/en/insights/detail.kc?sch_section=4&idx=22016.

“South Korea - Entertainment and Media.” International Trade Administration | Trade.gov, August 13, 2021. https://www.trade.gov/country-commercial-guides/south-korea-entertainment-and-media.

Spangler, Todd. “'Squid Game' Is Decisively Netflix No. 1 Show of All Time with 1.65 Billion Hours Streamed in First Four Weeks, Company Says.” Variety. Variety, November 22, 2021. https://variety.com/2021/digital/news/squid-game-all-time-most-popular-show-netflix-1235113196/.

Stangarone, Troy. “How Netflix Is Reshaping South Korean Entertainment.” – The Diplomat. for The Diplomat, April 29, 2019. https://thediplomat.com/2019/04/how-netflix-is-reshaping-south-korean-entertainment/.

Tassi, Paul. “'Squid Game' Is Now Netflix's Most Popular Show Ever, and It's Not Even Close.” Forbes. Forbes Magazine, April 21, 2022. https://www.forbes.com/sites/paultassi/2021/10/13/squid-game-is-now-netflixs-most-popular-show-ever-and-its-not-even-close/?sh=37438a356c42.

“Technology-Empowered Digital Trade in Asia Pacific: Deloitte China: TMT Industry.” Deloitte China. Deloitte, December 21, 2021. https://www2.deloitte.com/cn/en/pages/technology-media-and-telecommunications/articles/deloitte-launches-technology-empowered-digital-trade-in-asia-pacific-report-summary.html.

International Organization and Reports

Congressional Research Service, “Net Neutrality Law: An Overview”. May 27, 2022

Deloitte, “Socio-economic Impact of Netflix Korea”. September 28, 2020.

International Telecommunication Union, “Measuring the Information Society Report” 2017

Kobis, “Total audience and revenue (yearly)”

United States Trade Representative, “2022 National Trade Estimate Report: Foreign Trade Barriers”. 2022

World Trade Report, “Executive Summary”. 2018

WTO, “WTO Conference: The Use of Data in the Digital Economy”

G20 Digital Economy Development and Cooperation Initiative

Laws

KORUS FTA, ANNEX II SCHEDULE OF KOREA

Telecommunications Business Act, Article 22-7

Telecommunications Business Act, Article 30-5

Broadcasting Act, Chapter 2 Article 14 (Foreign capital investment and contribution)

Broadcasting Act, Chapter 3 Article 33 (Review Regulations)